

To: Chairman Thomas and members of the Senate Public Health, Welfare and Safety Committee HB479
From: Thomas C. Key, M.D.
Great Falls, MT 59405

Please vote NO on HB479

I am concerned regarding the upcoming House Bill 479 entitled 'Montana Unborn Child Pain and Suffering Prevention Act.'

Firstly, this is a wide ranging attempt to seek a ban on abortion which could well be extended to any age, given the very poorly constructed and defined scope of this particular proposal. To use a guise of fetal pain as a reason to restrict an abortion for reasons of choice or for medical reasons involving the mother or child's health is not supported by mainstream science and/or medical therapies. The use of fetal analgesia/anesthesia for fetal surgery per se should not be confused with the intent of this bill. I find the bill poorly written, very vague in its intent and without medical foundation. Furthermore, the bill does not provide direction to the physician or patient exactly how "fetal anesthesia" to be accomplished.

In general the decision to terminate a pregnancy after 20 weeks' gestation is usually for grievous maternal illness and/or life threatening or altering fetal disease. In my mind, there are three basic scientific considerations that this bill either does not address or truncates; (1) the mis-statement of scientific fact regarding the fetus and the perception of pain, (2) the procedures necessary to deliver anesthesia/analgesia to the unborn with attendant risks to the mother, (3) an absolute absence of data establishing any defined/proved benefit for the unborn fetus and/or its mother.

Evidence regarding the capacity for fetal pain is limited but indicates that fetal perception of pain is unlikely before the third trimester. Little or no evidence addresses the effectiveness of direct fetal anesthetic or analgesic techniques. Similarly, limited or no data exist on the safety of such techniques for pregnant women in the context of abortion. Anesthetic techniques currently used during fetal surgery are not directly applicable to abortion procedures.

Pain perception requires conscious recognition or awareness of a noxious stimulus. Neither withdrawal reflexes nor hormonal stress responses to invasive procedures prove the existence of fetal pain, because they can be elicited by nonpainful stimuli and occur without conscious cortical processing. Fetal awareness of noxious stimuli requires functional thalamocortical connections. Thalamocortical fibers begin appearing between 23 to 30 weeks' gestational age, while electroencephalography suggests the capacity for functional pain perception in preterm neonates probably does not exist before 29 or 30 weeks. For fetal surgery, women may receive general anesthesia and/or analgesics intended for placental transfer, and parenteral opioids may be administered to the fetus under direct or sonographic visualization. In these circumstances, administration of anesthesia and analgesia serves purposes unrelated to reduction of fetal pain, including inhibition of fetal movement, prevention of fetal hormonal stress responses, and induction of uterine atony.

Testimony submitted to the Montana Senate Public Health, Welfare, & Safety Committee April 1, 2015
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Anesthetics and analgesics are commonly used to alleviate pain and discomfort. Despite ongoing debate regarding fetal capacity for pain, fetal anesthesia and analgesia are still warranted for surgical procedures undertaken to promote fetal health. When long-term fetal well-being is a central consideration, evidence of fetal pain is unnecessary to justify fetal anesthesia and analgesia because they serve other purposes unrelated to pain reduction, including (1) inhibiting fetal movement during a procedure; (2) achieving uterine atony to improve surgical access to the fetus and to prevent contractions and placental separation; (3) preventing hormonal stress responses associated with poor surgical outcomes in neonates; and (4) preventing possible adverse effects on long-term neurodevelopment and behavioral responses to pain.

These objectives are not applicable to abortions. Instead, beneficence toward the fetus represents the chief justification for using fetal anesthesia or analgesia during abortion—to relieve suffering, if fetal pain exists. **As with any clinical decision, thorough safety and risk-benefit analyses should be undertaken before performing an intervention. Because the principle of beneficence also requires the woman's physician to act in her best interests, potential fetal benefit must be weighed against real risks to the woman's health.** The safety and effectiveness of proposed fetal anesthesia and analgesia techniques are discussed below.

Fetal surgery involving laparotomy, hysterotomy, or both requires general or regional anesthesia. Regional anesthesia, such as epidural anesthesia, does not anesthetize the fetus. General anesthesia is more commonly used because it induces uterine atony and fetal immobilization. Studies of inhalational agents in pregnant ewes determined that a dose capable of anesthetizing the ewe also anesthetized the fetus. Administering fentanyl, pancuronium, or vecuronium to the fetus intramuscularly may supplement analgesia or immobilization. For pregnant women, general anesthesia is associated with increased morbidity and mortality, particularly because of airway-related complications and increased risk of hemorrhage from uterine atony. Historically, general anesthesia was used in abortions, even in the first trimester, until studies found that general anesthesia was a leading cause of abortion-related mortality. In addition to safety concerns, general anesthesia increases the cost of abortion, making it prohibitively expensive for the majority of patients who pay out of pocket.

In contrast to fetal surgery requiring regional or general anesthesia, minimally invasive fetal procedures do not involve maternal laparotomy or hysterotomy and instead use needles or endoscopy to access the fetus. For the sake of reducing pain, the increased risks of general anesthesia are unjustified for these procedures; adults typically undergo similar procedures with no analgesia or only local analgesia. No established fetal analgesia protocol exists for these procedures, although 3 techniques have been proposed, namely, direct delivery of medications to the fetus, delivery of medications to the fetus via maternal intravenous infusion, and intra-amniotic delivery of medications.

Direct Delivery. One group has examined the effects of analgesics delivered directly to human fetuses during minimally invasive procedures. Twenty-eight fetuses that received intravenous fentanyl before hepatic vein blood transfusions had diminished changes in plasma β -endorphin concentration and cerebral blood flow, compared with fetuses not receiving fentanyl. The cortisol response was not significantly decreased with fentanyl. The investigators did not

examine risks for the woman, such as infection or uncontrolled bleeding. Furthermore, reducing the stress response is distinct from reducing pain. For example, plasma glucose and cortisol concentrations may not differ significantly between adults with and without postoperative pain.

Delivery via Maternal Intravenous Infusion. To achieve presumably effective fetal plasma concentrations of fentanyl by placental transfer, potentially unsafe doses would need to be administered to the woman. Although standard doses of fentanyl are generally safe for maternal analgesia during labor, *fentanyl can pose serious risks such as hypoventilation if maternal doses are significantly increased to achieve more extensive placental transfer.* Severe maternal hypoventilation may require endotracheal intubation, which increases risks and costs for the woman, as described above.

No data exist on the dosing or efficacy of using medications such as diazepam and morphine for fetal analgesia via maternal intravenous infusion, although studies have characterized the placental transfer of these medications. Two related studies found that low-dose remifentanyl via maternal intravenous infusion achieved fetal immobilization during laser coagulation of placental vessels. However, immobilization is not the equivalent of pain reduction, and these procedures did not involve surgery on the fetus.

Intra-amniotic Delivery. Intra-amniotic injection would be technically simpler than direct fetal injection, although the drug must be absorbed through fetal membranes and skin. Intra-amniotic sufentanil injection in 10 pregnant ewes resulted in fetal plasma concentrations that would control postoperative pain in human adults. Sufentanil concentrations in the ewes also reached adult human therapeutic concentrations without causing significant hemodynamic changes. However, the study did not evaluate fetal response to noxious stimuli, and no data exist regarding safety or effectiveness in humans.

Thus in summary, this bill puts forward a theory masquerading under a banner of beneficence while targeting not the beneficence of the requirement but rather abortion itself - placing an unusual burden on physicians and those patients who have very unfortunate reasons for seeking termination. **Ill-defined, ill-presented and poorly written wherein the true intent has little to do with a true and rational understanding of the fetus and its ability or inability to perceive pain.** I see this as a yet another attempt to hinder a woman's access to Choice, at all gestational ages.

Thomas C. Key, M.D.

Great Falls, MT 59405

Much of the information in this testimony is from the following article in the Journal of the American Medical Association:

Susan J. Lee, JD, Henry J. Peter Ralston, MD, and Eleanor A. Drey, MD. "Fetal Pain: A Systematic Multidisciplinary Review of the Evidence." *The Journal of the American Medical Association* 294.8 (2005): n. pag. Web. 10 Mar. 2015. <<http://jama.jamanetwork.com/article.aspx?articleid=201429>>.

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Blue Mountain Clinic Family Practice strongly urges this committee to oppose HB479. This bill proposes an egregious overstep of the government into the private medical decisions made between patient and doctor. Further, it criminalizes physicians for practicing medicine in the best interest of their patients.

At Blue Mountain Clinic we do not offer terminations at 20 weeks and we do not offer anesthesia. What we do offer is unparalleled patient care and support without judgment. Our staff of dedicated trained professionals focuses on creating an environment that is supportive, patient-centered, and choice-based. Each patient is met where they are and our emphasis is meeting the individual needs of the patient. Our trained staff provides comprehensive information and education regarding every procedure – fully informing every patient of their options.

This quality of care reflects our clinic and provider commitment to serve our patients in a way that meets their needs and choices.

HB479, however, works to minimize choice and therefore impair quality patient care by mandating unnecessary restrictions on provider and patient. This will compromise women's health in Montana.

Let's be honest about the intention HB479. This bill is masquerading as a compassionate effort to prevent pain and suffering, when in fact it would create suffering for women in Montana - women acting within their constitutional right to privacy which extends to medical decisions.

If you draw your attention to Section 2, sub-section 4 you will see this bill purports that mandated fetal anesthesia would not pose an undue burden on women seeking termination. This is an outright lie. Mandating anesthesia would substantially increase the cost of the procedure, and potentially force women to travel even greater distances to access appropriate care due to lack of neo-natal anesthesia providers. This bill is merely a cloaked effort to establish additional barriers to access and bar women from making choices about their bodies.

This bill seeks to erode abortion access and work toward establishing personhood at fertilization. It moves toward restricting all terminations.

This government, this committee, has no place making medical decisions for women in this state. I and Blue Mountain Clinic urge you to place that power in the hands of medical professionals and their patients.

We strongly urge you to oppose HB479.

3/11/15
Testimony to Montana House Human Services Committee
From: Joey Banks, MD
Missoula, MT

When I was a third year resident physician my husband and I had a desired pregnancy we were hopeful and happy about. At 21 weeks, we found out the fetus had VATER syndrome which causes congenital heart malformations, bone deformities, kidney disease, and requires a newborn to go through at least three surgeries in its first year of life. Painful surgeries that really do require anesthesia.

After consulting a pediatric heart surgeon, a neonatal physician, and our own primary care physician, we chose to terminate the pregnancy. Because I am a physician and also had competent medical providers, I understood the evidence-based, scientific facts about fetal pain then, and more research has been completed since my choice.

An ideological law that is a non-science-based, non-evidenced-based law, like this one, would have unnecessarily made this difficult decision even more difficult for us. We may have had to fly to another state to have the procedure. We might have had to pay more than we could afford.

I think the real reason this law is being presented is to restrict access to all abortions, but it will restrict access to abortions even like mine. The science shows that fetal anesthesia is not needed in first and second trimester abortions. The science has not concluded that fetal anesthesia provides any benefit in any abortion to the mother or fetus.

If we had not been able to find a provider to do fetal anesthesia, (a completely non-scientifically proven, unnecessary, costly procedure) our pregnancy would have ended in real pain for a newborn because of multiple surgeries that may or may not have saved our newborn's life.

I am glad I had educated, well-trained physicians who truly understood the medical science at the time of my decision to take care of me and guide me in my choices. We have two great kids and the exact family we were supposed to have.

Now that I am a physician this type of law disturbs me even more. I want my family practice patients to be able to trust me when I am helping them make decisions because I have read and learned the science. I want them to know I am looking out for them regarding health care costs and not adding unnecessary costs for any reason. I want them to know I am on their side when it comes to protecting their rights to access health care when needed.

I ask you to please vote no on House Bill 479 and support women who have to make difficult decisions like mine.

Thank you,
Joey Banks, MD
Family Physician in Missoula Montana